JOURNAL OF CLINICAL PATHOLOGY

The Journal of The Association of Clinical Pathologists

VOLUME TWENTY-FIVE
1972

EDITOR
A. GORDON SIGNY

ASSISTANT EDITOR
H. E. M. KAY

Editorial Board

ROSEMARY BIGGS
T. CRAWFORD
W. M. DAVIDSON
R. A. B. DRURY
J. A. DUDGEON
M. S. DUNNILL
A. C. LENDRUM
G. K. McGOWAN
N. H. MARTIN
M. SANDLER
J. L. STAFFORD
E. JOAN STOKES
JOAN TAYLOR
BARBARA H. BILLING
(representing the Association of Clinical Biochemists)
EDITOR *British Medical Journal*

BRITISH MEDICAL ASSOCIATION
TAVISTOCK SQUARE · LONDON WCIH 9JR

Contents

No. 1 JANUARY 1972 *page*

The histological diagnosis of chronic gastritis in fibreoptic gastroscope biopsy specimens R. WHITEHEAD, S. C. TRUELOVE, AND M. W. L. GEAR 1
The morphology of the lymph node in the macroglobulinaemia of Waldenström C. V. HARRISON 12
Aspects of tryptophan metabolism in health and disease: a review D. P. ROSE 17
Preparations of unfixed undemineralized bone sections: the Bright bone cryostat A. D. PEARSE AND D. L. GARDNER 26
Comparison of two triiodothyronine uptake techniques for the assessment of thyroid function VIVIAN CHAN, JOAN MCALISTER, AND J. LANDON 30
The significance of variations in immunoreactive and clottable fibrinogen in health and following thrombosis P. WOLF, G. W. FARRELL, AND K. W. WALTON 36
The heterogeneity of the anticoagulant response to heparin J. WORTH ESTES 45
Sickle-cell haemoglobin C disease in London A. J. BLACK, P. I. CONDON, B. M. GOMPELS, R. L. GREEN, R. G. HUNTSMAN, AND G. C. JENKINS 49
Human antibody response to lipopolysaccharides from *Neisseria gonorrhoeae* M. E. WARD AND A. A. GLYNN 56
Bacteriocins from *Neisseria gonorrhoeae* and their possible role in epidemiological studies J. FLYNN AND M. G. MCENTEGART 60
Coagulase-negative strains of *Staphylococcus pyogenes* R. BAYSTON 62
The effect of passage and iron on the virulence of *Pseudomonas aeruginosa* CHRISTINE M. FORSBERG AND J. J. BULLEN 65
An evaluation of three methods of typing organisms of the genus Proteus OONAGH TRACY AND E. JEAN THOMSON 69
Urinary tract infection and oral penicillin G J. HULBERT 73
Virucidal activity of chlorhexidine on strains of *Herpesvirus hominis*, poliovirus, and adenovirus ANDREW BAILEY AND MAURICE LONGSON 76
Disseminated *Herpesvirus hominis* (*Herpes simplex*) infection: retrospective diagnosis by light and electron microscopy of paraffin wax-embedded tissues A. G. ROSE AND W. B. BECKER 79

Technical methods

Improved immunofluorescence obtained with a tungsten halogen lamp in a modified inverted microscope G. V. HEIMER AND C. E. D. TAYLOR 88
Safety of portable inoculation cabinets STUART J. LINE 93
Use of ultraviolet light in the typing of *Pseudomonas aeruginosa* strains by pyocin production L. LOVREKOVICH, H. LOVREKOVICH, AND D. C. JENKINS 94

Present day practice

Photographic recorder for erythrocyte sedimentation rates O. H. B. GYDE 96
Book reviews 98

No. 2 FEBRUARY 1972

Ischaemic lesions of the alimentary tract G. S. A. MCDONALD AND D. O'Br-HOURIHANE 99
Hilar cell tumour of the ovary M. C. ANDERSON 106
The diagnosis of trophoblastic tumours from uterine curettings C. W. ELSTON AND K. D. BAGSHAWE 111
The structure of the breast in mucoviscidosis A. MILFORD WARD 119
The value of a study of the mucosubstances in rectal biopsies from patients with carcinoma of the rectum and lower sigmoid in the diagnosis of premalignant mucosa M. ISABEL FILIPE 123
Evaluation of the Lundh test in the diagnosis of pancreatic disease G. E. LEVIN, G. R. YOUNGS, AND I. A. D. BOUCHIER 129
Measurements of concentrations of human serum immunoglobulins 133
Immunoglobulin levels in infantile pneumocystosis ELFRIEDE KOHOUT, CORNELIUS POST, BAHRAM AZADEH, WERNER DUTZ, BASHI BANDARIZADEH, AND DARIUS KADIVAR 135
Serum hydroxybutyrate dehydrogenase (HBD) assays in the clinical laboratory K. MONTAZEMI AND J. G. LINES .. 141
The nature of the alkaline phosphatases of bile C. P. PRICE, P. G. HILL, AND H. G. SAMMONS 149
Clinical application and mechanization of a simple and inexpensive method for estimating T_3 uptake in serum W. W. WALTHER 155
Haem biosynthesis studied in patients with rheumatoid arthritis S. V. JOHANSSON AND P. O. STRANDBERG 159
A satisfactory quantitative test of lymphocyte response to phytohaemagglutinin for the definition of normal control values and recognition of immunological defects MARGARET G. FITZGERALD 163
Target cells in haemoglobinopathies L. R. DAVIS 169
Microbiological assay of amino acids in serum: valine, leucine, and methionine J. A. BLACKMORE AND T. E. PARRY 171
Changes in antibiotic sensitivity patterns of Gram-negative bacilli in burns ELIZABETH ROE AND E. J. L. LOWBURY 176
The isolation of an X-dependent strain of Haemophilus from otitis media identified as *H. haemoglobinophilus* (*canis*) JOYCE FRAZER AND K. B. ROGERS 179

Technical method

The effect of autoclaving characteristics on the recovery of serum vitamin B_{12} determined by a radioisotope dilution method D. H. ORRELL AND A. D. CASWELL 181
Letter to the Editor 183
Book reviews 183

Contents

No. 3 MARCH 1972

	page
The origin of fibrin breakdown products and the interpretation of their appearance in the circulation M. J. GALLIMORE, H. M. TYLER, AND J. T. B. SHAW	185
Timed fibrin digestion: A simplified technique for the measurement of the fibrinolytic activity of the blood J. A. HICKMAN AND I. C. GORDON-SMITH	191
Effect of trimethoprim on folate-dependent DNA synthesis in human bone marrow JANE SIVE, R. GREEN, AND J. METZ	194
Manipulative and inherent errors in anti-D quantitation using the AutoAnalyzer H. H. GUNSON, P. K. PHILLIPS, AND F. STRATTON	198
The adverse effect of bromelin in anti-D quantitation using the AutoAnalyzer H. H. GUNSON, P. K. PHILLIPS, AND F. STRATTON	206
Aggregation of human platelets by commercial preparations of bovine and porcine antihaemophilic globulin C. D. FORBES, R. D. BARR, G. P. MCNICOL, AND A. S. DOUGLAS	210
Evaluation of an automatic platelet counting system utilizing whole blood R. M. ROWAN, W. ALLAN, AND R. J. PRESCOTT	218
The lethal effect of tryptone-soya broth PAMELA M. WATERWORTH	227
Normal osteoid tissue VINITA RAINA	229
Necropsy findings in a case of progressive vaccinia F. J. PARADINAS AND EVE WILTSHAW	233
Histological Hashimoto's disease in a benign cystic ovarian teratoma ALAN A. WATSON	240
A method for the quantitation of small intestinal biopsy specimens M. S. DUNNILL AND R. WHITEHEAD	243
Chronic glomerular nephritis in a man with an IgM cold autoantibody of anti-I specificity and a cold lympho-cytotoxic antibody R. R. BAILEY, M. EL-MAGHRABY, I. C. BALFOUR, AND T. R. MITCHELL	247
Oral contraceptives and tryptophan metabolism: Effects of oestrogen in low dose combined with a progestagen and of a low-dose progestagen (megestrol acetate) given alone D. P. ROSE AND P. W. ADAMS	252
The T_4-free thyroxine index as a test of thyroid function of first choice P. J. N. HOWORTH AND RICHARD L. WARD	259
Urinary inorganic phosphorus determinations D. H. JUNG AND A. C. PAREKH	263
Technical methods	
A fast technique for the separation and detection of amylase isoenzymes using a chromogenic substrate T. J. DAVIES	266
A screen test for rubella haemagglutination inhibition antibodies W. R. G. THOMAS AND WENDY J. KEMPSELL	267
A rapid staining technique for *Pneumocystis carinii* J. W. SMITH AND W. T. HUGHES	269
A simple method for studying nuclear division in free-living soil amoebae ADELE JAMIESON AND KEVIN ANDERSON	271
Letters to the Editor	273
Book reviews	273

No. 4 APRIL 1972

Quantitative observations on mineralized and non-mineralized bone in the iliac crest H. A. ELLIS AND KATHLEEN M. PEART	277
Aortic disease in idiopathic retroperitoneal and mediastinal fibrosis M. J. MITCHINSON	287
The diagnosis of Hodgkin's disease in surgically excised spleens GEOFFREY FARRER-BROWN, M. H. BENNETT, C. V. HARRISON, YVONNE MILLETT, AND A. M. JELLIFFE	294
Adenoid basal carcinoma of the cervix uteri K. B. SHILKIN	301
Angiofollicular lymph node hyperplasia (Castleman) DIMITRA ANAGNOSTOU AND C. V. HARRISON	306
Histological and ultrastructural findings in a case of the Sézary syndrome J. J. LABAZE, E. A. MOSCOVIC, T. D. PHAM, AND H. A. AZAR	312
A simple assay of intrinsic factor-vitamin B_{12} complex employing the binding intrinsic factor antibody ELIZABETH JACOB AND H. A. W. O'BRIEN	320
An immunoradiometric assay for ferritin in the serum of normal subjects and patients with iron deficiency and iron overload G. M. ADDISON, M. R. BEAMISH, C. N. HALES, M. HODGKINS, A. JACOBS, AND P. LLEWELLIN	326
An automated screening technique for the detection of sickle-cell haemoglobin D. M. CANNING, R. S. CRANE, R. G. HUNTSMAN, AND G. I. YAWSON	330
Methods for improving the sensitivity and specificity of the fibrin plate NEIL EDWARD	335
Data processing in hospital bacteriology: experience of 18 months' trial J. L. WHITBY AND JANET N. BLAIR	338
The relationship between fluorescent, agglutinating, and precipitating antibodies to *Candida albicans* and their immunoglobin classes T. LEHNER, HELEN R. BUCKLEY, AND I. G. MURRAY	344
A rapid automated screening technique for the detection of placental-like alkaline phosphatase in malignant disease R. C. JENNINGS, D. BROCKLEHURST, AND M. HIRST	349
The relation of growth hormone to altered carbohydrate metabolism in women taking oral contraceptives D. S. J. MAW AND VICTOR WYNN	354
Present day practice	
An assessment of a latex agglutination slide test for toxoplasma antibody W. KWANTES, R. A. PAYNE, G. B. LUDLAM, J. B. BRIDGES, AND D. G. FLECK	359
Technical methods	
A quick method for the isolation of glomeruli from human kidney A. H. NAGI AND W. KIRKWOOD	361
Cultivation of human embryonic liver cells in disposable microplates MARIE A. BRYCESON, PATRICIA E. TAYLOR, AND A. J. ZUCKERMAN	362

page

Storage of lymphocytes for immunological study T. M. BELL, E. A. CASPARY, AND E. J. FIELD 364
A safe and inexpensive method for setting up the Westergren ESR A. K. RAY 366
Golgi method for old formol-fixed human foetal tissue DOROTHY MEYER AND SERGE DUCKETT 367
Letters to the Editor 368
Book reviews 369
Conferences 372

No. 5 MAY 1972

Renal hyalin. A study of amyloidosis and diabetic fibrinous vasculosis with new staining methods A. C. LENDRUM, W. SLIDDERS, AND D. S. FRASER 373
Xanthogranulomatous pyelonephritis. A comparison of the disease in the cat and man with special reference to the origin of the fat G. B. D. SCOTT AND P. J. QUIGLEY 397
Australia antigen and antibody in British patients with leprosy TIN SHWE AND A. J. ZUCKERMAN 401
Cytoplasmic particles in hepatocytes of patients with Australia antigen-positive liver disease MARGARET E. HAYNES, DAVID W. G. HAYNES, AND ROGER WILLIAMS 403
Studies on the prekallikrein-bradykininogen system in liver disease DAVID STEWART, LAURENCE M. BLENDIS, AND ROGER WILLIAMS 410
Electrophoretic separation and differentiation of enzymes from human and from porcine liver D. N. BARON AND J. E. BUTTERY 415
An original approach to the diagnosis of scoline-induced apnoea A. FISHTAL, R. T. EVANS, AND C. N. CHAPMAN 422
Effect *in vitro* on platelet function of two compounds developed from the pyrimidopyrimidines S. D. SLATER, A. G. G. TURPIE, A. S. DOUGLAS, AND G. P. MCNICOL 427
Cross-reacting material in genetic variants of haemophilia B DOMINIQUE MEYER, ETHEL BIDWELL, AND MARIE JOSÉ LARRIEU 433
A comparison of the absorbed fluorescent treponemal antibody (FTA-ABS) test and other screening tests for treponemal disease in patients attending a venereal disease clinic A. E. WILKINSON, G. SCRIMGEOUR, AND P. RODIN 437
Observations on interactions between fluorescein-iso-thiocyanate conjugates and cells *in vitro* G. SANDER AND J. P. JACOBS 441
Virological studies of sudden, unexplained infant deaths in Glasgow 1967-70 G. E. D. URQUHART AND N. R. GRIST 443
Antibacterial activity of nifuratel in urine and serum J. MCGEACHIE, G. ROBINSON, AND D. BLACK 447

Technical methods

A solid medium for visual demonstration of coagulase production by *Staphylococcus aureus* J. C. M. VAN DER VIJVER, C. A. KRAAYEVELD, AND M. F. MICHEL 450
Lysis of red cells from haematological disorders N. STATHAKIS, G. ARAPAKIS, K. KIRKOU, AND C. GARDIKAS 452
Estimation of serum and urinary muramidase with the eel aggregometer J. P. HAYES 454
Conversion of the Braun Unita I and perfusor to disposable syringes for continuous intravenous heparin infusion D. M. RAMSAY 456

Present day practice

False positive results with a rapid solubility test for haemoglobin S J. S. LILLEYMAN, T. BILLS, AND R. J. GUYER ... 458
Letters to the Editor 459
Book reviews 460

No. 6 JUNE 1972

ACP Presidential Address: The 'body politic' in pathology A. G. MARSHALL 461
Value of surface counting in predicting response to splenectomy in haemolytic anaemia S. AHUJA, S. M. LEWIS, AND L. SZUR 467
Disordered blood coagulation in burned children receiving high molecular weight dextran TREVOR THOMAS, ARTHUR MORRIS, AND MICHAEL S. ROSE 473
Platelet ascorbic acid levels in normal subjects and in disease J. V. LLOYD, P. S. DAVIS, H. EMERY, AND H. LANDER .. 478
Platelet adhesiveness, coagulation, and fibrinolytic activity in obesity C. P. WARLOW, A. MCNEILL, D. OGSTON, AND A. S. DOUGLAS 484
Storage, retrieval, and inventory control of donor red cells in liquid nitrogen R. MITCHELL AND W. MUIR 487
The occurrence of folic acid (pteroyl-L-monoglutamic acid) in human blood serum after small oral doses R. J. LEEMING, HEATHER PORTMAN-GRAHAM, AND J. A. BLAIR 491
Nitro blue tetrazolium test in children with kwashiorkor with a comment on the use of latex particles in the test SAMI SHOUSHA AND KARIM KAMEL 494
Primary glomerular disease with extraglomerular vascular osmiophilic deposits A. H. NAGI, F. ALEXANDER, AND R. LANNIGAN 498
Application of an improved system of electrophoresis in acrylamide gel to studies on the sera of different species N. ST. G. HYSLOP 508

Contents

page

The relation of total body potassium to height, weight, and age in normal adults K. BODDY, PRISCILLA C. KING, R. HUME, AND ELSPETH WEYERS ... 512
Clinical pharmacology of cephalexin administered by intravenous injection J. A. DAVIES AND J. M. HOLT ... 518
The isolation of influenza viruses P. G. HIGGINS AND EILEEN M. ELLIS ... 521
A serum-free medium for testing fermentation reactions in *Neisseria gonorrhoeae* JOHN FLYNN AND SHEENA A. WAITKINS ... 525
Serotype and sulphonamide sensitivity of meningococci isolated from 1966 to 1971 J. D. ABBOTT AND J. F. R. GRAVES ... 528
Trimethoprim-sulphamethoxazole in urinary tract infection due to *Streptococcus faecalis* B. CHATTOPADHYAY ... 531
Weight of the left and right ventricle of the heart during fetal life ALISON HISLOP AND LYNNE REID ... 534
Myeloma of the oesophagus W. T. MORRIS AND J. L. PEAD ... 537
An evaluation of the Celloscope 401 electronic blood cell counter T. R. J. LAPPIN, A. LAMONT, AND M. G. NELSON 539
A modified rapid slide test for antistreptolysin O G. B. P. INGRAM AND J. E. P. HUGHES ... 543

Present day practice

Erroneously high results in an AutoAnalyzer method for the determination of iron on patients' sera A. N. LESTAS AND M. P. B. TAN ... 545

Technical methods

A simple concentration method for the detection of parasitic ova and cysts in faeces R. G. THOMPSON ... 546
New technique for the observation of sickling under known pO_2 and percentage oxygen dissociation P. LAIDLER AND G. HUNTSMAN ... 547
Conversion of a continuous flow system into a semidiscrete one for use in automatization of serological methods J. F. COSTER ... 548
Proceedings of 88th general meeting of the Association of Clinical Pathologists ... 550
Book reviews ... 558

No. 7 JULY 1972

Obituary
A. G. Signy, Editor of the *Journal of Clinical Pathology* 1944-1972 ... 559
Congenital dyserythropoietic anaemia with erythroblastic multinuclearity MALCOLM BRIGHT, JEREMY COBB, BYRON EVANS, AND T. E. PARRY ... 561
The influence of spleen size on the distribution of red cells and plasma P. J. TOGHILL AND SHEILA GREEN ... 570
Effect of feeding fat on fibrinolysis, stypven time, and platelet aggregation in elderly Africans J. C. FERGUSON, N. MACKAY, AND G. P. MCNICOL ... 574
Exfoliative cytology of diffuse mesothelioma G. HEFIN ROBERTS AND G. M. CAMPBELL ... 577
Immunoelectroosmophoresis in the diagnosis of meningococcal infections BARBARA M. TOBIN AND D. M. JONES 583
In-use testing of disinfectants in hospitals JEAN PRINCE AND G. A. J. AYLIFFE ... 586
Serum α-macroglobulins in renal disease and preeclampsia C. H. W. HORNE, J. D. BRIGGS, P. W. HOWIE, AND A. C. KENNEDY ... 590
Data processing in haematology M. G. NELSON AND E. ELDER ... 594
Red cell size as measured by the Coulter model S TAKASHI OKUNO ... 599
Some observations and improvements on SMA 6/60 determinations of creatinine MADELEINE CLOSE-MOLL AND J. G. LINES ... 603

Present day practice

Immunoglobulin and intrinsic factor antibody in the sera of patients with pernicious anaemia HING-YAN SHUM, ARTHUR M. STREETER, AND BARRY J. O'NEILL ... 606

Technical method

Simultaneous staining of phospholipids, basic proteins, and glycogen on the same slide B. PRESENTEY AND K. PERK ... 608
Book reviews ... 611
Supplement—
Problems Related to Fibrinolysis—Theoretical and Clinical ... 613

No. 8 AUGUST 1972

The role of fibrin deposition in diabetic glomerulosclerosis: a light, electron and immunofluorescence microscopy study A. FARQUHAR, MARY K. MACDONALD, AND J. T. IRELAND ... 657
Pulmonary fibrosis following therapy with Melphalan for multiple myeloma B. W. CODLING AND T. M. H. CHAKERA ... 668
Pathological findings after right lung transplantation in a patient with fibrosing alveolitis K. B. SHILKIN AND LYNNE REID ... 674
The detection of fibrinogen/fibrin degradation products by means of a new antibody-coated latex particle M. BERNADETTE GARVEY AND JOAN M. BLACK ... 680
Amyloid goitre P. D. JAMES ... 683
Spontaneous infarction of superficial lymph nodes J. DOUGLAS DAVIES AND A. G. STANSFELD ... 689

Contents

page

Quantitative sputum culture as a means of excluding false positive reports in the routine microbiology laboratory M. J. B. WILSON AND D. E. MARTIN ... 697
A 'virus-free' cell line derived from a patient with infectious mononucleosis S. D. MARSTON, E. J. P. ALMOND, N. P. BISHUN, E. D. MAUNSELL, AND R. N. P. SUTTON ... 701
Chromosome abnormalities in chronic active hepatitis D. T. STEFANESCU, M. MOANGA, M. TEODORESCU, AND J. BRUCHER ... 705
Resistance of *Staphylococcus aureus* to sulphamethoxazole and trimethoprim L. S. NAKHLA ... 708
Effect of antibiotic resistance on the survival of *Staphylococcus aureus* R. W. LACEY ... 713
The sensitivity of diphtheria bacilli to eight antibiotics IRAJ ZAMIRI AND M. G. MCENTEGART ... 716
Serological investigations in children with colonized Spitz-Holter valves R. BAYSTON ... 718
Comparative and serial assays of folate metabolism in anticonvulsant-treated epileptics P. R. TEASDALE AND JOHN PEARCE ... 721
The measurement of serum thyroxine in children JENNIFER RYNESS ... 726

Present day practice

An improved solubility test for haemoglobin S K. G. A. CLARK ... 730
Selective medium for the isolation of *Bordetella pertussis* and *parapertussis* ENID M. SUTCLIFFE AND J. D. ABBOTT 732

Technical methods

Experiences in the use of commercial antisera for the capsular typing of klebsiella species M. W. CASEWELL ... 734
Reliable routine estimation of small amounts of foetal haemoglobin by alkali denaturation M. E. PEMBREY, P. MCWADE, AND D. J. WEATHERALL ... 738
A technique for demonstrating fibrinolysis by cutaneous bacteria DOROTHY A. SOMERVILLE ... 740
Letters to the Editor ... 742
Book reviews ... 743

No. 9 SEPTEMBER 1972

A clinical and experimental study of platelet function in chronic renal failure E. P. EVANS, R. A. BRANCH, AND A. L. BLOOM ... 745
Detection of fibrinogen-fibrin degradation products by counterelectrophoresis JEROME I. BRODY ... 754
A comparison of the TRCII and latex-particle tests for the titration of FR-antigen C. L. AROCHA-PINAÑGO ... 757
A stable haemagglutinating antigen for detecting toxoplasma antibodies H. THORBURN AND H. WILLIAMS ... 762
Variations in interferon production by lymphocytes from patients with chronic lymphatic leukaemia A. M. R. MACKENZIE ... 768
An example of anti-s causing mild haemolytic disease of the newborn M. J. DAVIE, D. S. SMITH, URSULA M. WHITE, AND D. DYBALL ... 772
Radioimmunoassay of human growth hormone: technique and application to plasma, cerebrospinal fluid, and pituitary extracts FRANCES J. THOMAS, H. M. LLOYD, AND M. J. THOMAS ... 774
An evaluation of the Monosticon rapid slide test for the diagnosis of infectious mononucleosis G. L. SCOTT AND C. J. PRIEST ... 783
The rapid plasma reagin (circle) card test in biological false positive and leprosy sera M. F. GARNER AND J. L. BACKHOUSE ... 786
Serum protein levels in primary biliary cirrhosis R. N. M. MACSWEEN, C. H. W. HORNE, ANNE J. MOFFAT, AND HAZEL M. HUGHES ... 789
Foetus in foetu: serological assessment of monozygotic origin by automated analysis M. J. BOYCE, J. W. LOCKYER, AND C. B. S. WOOD ... 793
The erythrasma microorganism *in situ*: studies using the skin surface biopsy technique R. MARKS, N. D. RAMNARAIN, B. BHOGAL, AND N. T. MOORE ... 799
Congenital dilatation of the intraheptatic bile ducts with cholangiocarcinoma P. J. GALLAGHER, R. R. MILLIS, AND M. J. MITCHINSON ... 804
Mucosal metaplasia in the appendix J. B. MACGILLIVRAY ... 809
Granuloma venereum S. B. BHAGWANDEEN AND Y. A. MOTTIAR ... 812
A histological analysis of granulomatous hepatitis M. HUGHES AND H. FOX ... 817
Light and electron microscopy of globular hyaline inclusions in liver cells J. C. E. UNDERWOOD ... 821
The teaching of chemical pathology to medical students in the United Kingdom D. N. BARON AND ANGELA FAIRNEY ... 827

Technical methods

An immunological method for the detection and estimation of fetal haemoglobin J. KOHN AND B. V. PAYNE ... 830
Differential staining of neuronal and glial nuclei SERGE DUCKETT ... 832
Improved sensitivity of the electrophoresis method by tannic acid for detection of Australia antigen R. HOPKINS AND P. C. DAS ... 832
Letters to the Editor ... 834
Book reviews ... 836

Contents

No. 10 OCTOBER 1972

	page
Isolation of a mycoplasma from sarcoid tissue ELLI JANSSON, MATTI HANNUKSELA, HANS EKLUND, HELENA HALME, AND SIRKKA TUURI	837
Immunofluorescence for routine diagnosis of respiratory syncytial virus infection G. E. D. URQUHART AND G. H. WALKER	843
A fluorescent antibody test in the diagnosis of farmer's lung D. PARRATT AND J. A. PEEL	846
Liver morphology in acute viral hepatitis related to the hepatitis B antigen S. IWARSON, P. LUNDIN, AND S. HERMONDSSON	850
Observations on a new family showing bisalbuminaemia of the slow type TERESA MIKULSKA, PAWEŁ MIKULSKI, AND JERZY ROGULSKI	856
Changes in the normal range of thyroidal radioiodine uptake D. H. KEELING AND E. S. WILLIAMS	863
Increased brain weight/liver weight ratio as a necropsy sign of intrauterine undernutrition JOHN M. ANDERSON	867
Acute villous inflammation in the placenta following intrauterine transfusion JEAN M. SCOTT AND A. HENDERSON	872
Starch and talc emboli in drug addicts' lungs D. LAMB AND G. ROBERTS	876
A case of abortion consequent upon infection with *Brucella abortus* biotype 2 PAULINE M. POOLE, D. B. WHITEHOUSE, AND MARGARET M. GILCHRIST	882
Some factors influencing the effect of cholesterol on streptolysin O activity K. C. WATSON, T. P. ROSE, AND E. J. C. KERR	885
The role of creatinine and histidine in Benedict's qualitative test for reducing sugar in urine B. K. SUR. R. K. SHUKLA, AND V. S. AGASHE	892
Mode of action of creatinine on colour of cuprous oxide precipitate in Benedict's qualitative sugar test B. K. SUR, R. K. SHUKLA, AND V. S. AGASHE	896
A rapid micro-method for the screening and measurement of barbiturates and related compounds in plasma by gas-liquid chromatography R. J. FLANAGAN AND G. WITHERS	899
Present day practice	
Problems in quality control in determinations of serum total iron-binding capacity by the magnesium carbonate method J. LEGGATE AND A. E. CROOKS	905
Routine determination of 5′ nucleotidase activity of human serum using the LKB 8600 reaction rate analyser D. M. GOLDBERG AND G. ELLIS	907
Technical methods	
A simple method for chromosome banding E. GRACE AND A. D. BAIN	910
Technique for the performance of the nitro-blue tetrazolium (NBT) test R. FREEMAN AND B. KING	912
Reprocessing of wax-embedded tissue blocks for the electron microscope applied to Crohn's disease T. WATSON, M. J. FULKER, AND M. G. COOK	914
Letters to the Editor	916
Book reviews	917

No. 11 NOVEMBER 1972

ACP Presidential Address: Medical microbiology for patient and community SIR JAMES HOWIE	921
The preparation of a 'metal-free' nappy and its application to metabolic balances in children F. W. ALEXANDER AND H. T. DELVES	927
Rapid analysis of pregnanediol in pregnancy urine W. COOPER, M. G. COYLE, AND V. K. SMITH	933
Standardization of clinical enzyme assays: a reference method for aspartate and alanine transaminases J. H. WILKINSON, D. N. BARON, D. W. MOSS, AND P. G. WALKER	940
The sea-blue histiocyte syndrome with hepatic porphyria and infectious mononucleosis M. L. GHOSH	945
Bone marrow lipofuscin K. G. A. CLARK AND W. M. DAVIDSON	947
The Kmif (Kveim-induced macrophage migration inhibition factor) test in sarcoidosis W. JONES WILLIAMS, E. PIOLI, D. J. JONES, AND M. DIGHERO	951
Incidence of haemagglutinating antibodies to meningococci in north-west England D. M. JONES AND BARBARA M. TOBIN	955
Identification and characterization of *Moraxella phenylpyruvica* J. J. S. SNELL, L. R. HILL, AND S. P. LAPAGE	959
Further study of strontium selenite and selenite F broths for the isolation of *Salmonella typhi* P. Y. CHAU AND C. R. FORREST	966
Isolation of Aeromonas species from clinical sources A. W. MCCRACKEN AND R. BARKLEY	970
Stimulation of growth on a deficient medium of a *Klebsiella aerogenes* species by sulphonamide, para-amino benzoic acid, nitrofurantoin, and some other substances D. MCGHIE, J. G. P. HUTCHISON, AND R. G. FINCH	976
The *in-vitro* activity of tobramycin compared with that of other aminoglycosides PAMELA M. WATERWORTH	979
Computer listing of the effects of drugs on laboratory data D. S. YOUNG, D. W. THOMAS, AND R. B. FRIEDMAN	984
The role of operational research in clinical chemistry J. PETO, L. G. WHITBY, AND D. J. FINNEY	989
Technical methods	
Preliminary investigation on a rapid method for the concentration and processing of extracellular blood parasites for electron microscopy R. H. CAVILL AND J. M. GOLDSMID	997
The localization of viable bacteria in tissue P. D. MEERS AND A. C. HUNT	1000
Book reviews	1001
Proceedings of the 89th general meeting of the Association of Clinical Pathologists	1002

No. 12 DECEMBER 1972

page

The porphyrias: A review G. H. ELDER, C. H. GRAY, AND D. C. NICHOLSON 1013
Serum enzyme changes after intramuscular bleeding in patients with haemophilia and Christmas disease CHARLES D. FORBES, JOHN KING, COLIN R. M. PRENTICE, AND GEORGE P. MCNICHOL 1034
The partial thromboplastin (cephalin) time test L. POLLER AND JEAN M. THOMSON 1038
Studies of contact activation of blood in haemodialysis E. N. WARDLE AND D. A. PIERCY 1045
Experience with microbiological assay for folate using a chloramphenicol-resistant *L. casei* strain I. CHANARIN, RITA KYLE, AND JENNIFER STACEY 1050
A comparison of two methods of prognostic typing in breast cancer D. R. TURNER AND C. L. BERRY 1053
Spicular arrangement of amyloid in renal biopsy I. D. ANSELL AND A. M. JOEKES 1056
Congenital stenosis and atresia of the jejunum and ileum D. J. DESA 1063
The localization of the Australia antigen in the liver by immunofluorescence T. AKEYAMA, T. KAMADA, T. KOIZUMI, AND H. ABE 1071
Measurement of DNA synthesis in leucocyte microcultures J. H. ROBBINS 1075
Latex agglutination in the diagnosis of meningococcal meningitis W. P. J. SEVERIN 1079
Hydrolysis of casein: a differential aid for the indentification of *Serratia marcescens* WILLIAM A. SALISBURY AND JOSEPH J. LIKOS 1083
Characteristics of some co-trimoxazole-resistant Enterobacteriaceae from infected patients J. BARKER, D. HEALING, AND J. G. P. HUTCHISON 1086
Laboratory assessment of the antimycotic drug clotrimazole R. J. HOLT AND R. L. NEWMAN 1089

Technical methods

A simple, inexpensive semi-continuous or continuous culture apparatus WILLIAM F. ZERBY, S. GRANT MULHOLLAND, AND SAMUEL J. DE COURCY, JR 1098
An adjustable, semi-automatic dispenser for use with dry absorbents in protein binding techniques K. H. OUTCH, P. M. DENNIS, AND J. CULROSS 1099

Letter to the Editor 1101
Book reviews 1101
Index to Volume 25 1103
Contents of Volume 25